As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name, and

I believe I am an original, first and joint inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled

GENES FOR THE BIOSYNTHESIS OF EPOTHILONES the specification of which was filed on June 17, 1999 as U.S. Application No. 09/335,409.

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims.

I acknowledge my duty to disclose all information which is known by me to be material to the patentability of this application as defined in 37 C.F.R. §1.56.

I hereby claim the benefit under 35 U.S.C. §119(a)-(d) or §365(b) of any foreign application(s) for patent or inventor's certificate listed below and under 35 U.S.C. §365(a) of any PCT international application(s) designating at least one country other than the United States listed below and have also listed below any foreign application(s) for patent or inventor's certificate or any PCT international application(s) designating at least one country other than the United States for the same subject matter and having a filing date before that of the application the priority of which is claimed for that subject matter:

None

I hereby claim the benefit under 35 USC §119(e) of any United States provisional application(s) listed below:

Application No.	Filing Date
60/155,183	June 18, 1998
60/101,631	September 24, 1998
60/118,906	February 5, 1999

I hereby claim the benefit under 35 U.S.C. §120 of any United States application(s) listed below and under 35 U.S.C. §365(c) of any PCT international application(s) designating the United States listed below and, insofar as the subject matter of each of the

claims of this application is not disclosed in said prior application(s) in the manner required by the first paragraph of 35 U.S.C. §112, I acknowledge the duty to disclose all information known by me to be material to patentability as defined in 37 C.F.R. §1.56 which became available between the filing date(s) of the prior application(s) and the national or PCT international filing date of this application:

None

I hereby appoint the attorneys and agents associated with Customer No. 22847, respectively and individually, as my attorneys and agents, with full power of substitution and revocation, to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith.

Please address all communications to Larry W. Stults, Novartis Corporation, Patent Department, P.O. Box 12257, Research Triangle Park, NC 27709-2257.

 RST			18 11 /		-	ъ.
r) C'I	17.1	1 N 1	15(1)	- 1		_

Full name

Thomas Schupp

Signature

Thomas I day

Date

Odobe 22, 1999

(MM/DD/YY)

Citizenship

Switzerland

Residence

Mohlin, Switzerland

P.O. Address

Froschmattweg 5

Mohlin 4313 Switzerland

SECOND JOINT INVENTOR:

Full name

James Madison Ligon

Signature

Date

(MM/DD/YY)

Citizenship

United States of America

Residence

Apex, North Carolina

P.O. Address

3616 South Point Drive

Apex, North Carolina 27502

THIRD JOINT INVENTOR:

Full name

Istvan Molnar

Signature

Date

(MM/DD/YY)

Citizenship

Hungary





Residence

Durham, North Carolina

P.O. Address

905 Starling Lane

Durham, North Carolina 27713

FOURTH JOINT INVENTOR:

Full name

Ross Zirkle

Signature

Date

(MM/DD/YY)

Citizenship

United States of America

Residence

Raleigh, North Carolina

P.O. Address

6532 Wynbrook Way

Raleigh, North Carolina 27612

FIFTH JOINT INVENTOR:

Full name

Devon Dawn Cyr

Signature

Date

(MM/DD/YY)

Citizenship

United States of America

Residence

Fuquay-Varina, North Carolina

P.O. Address

413 Vuncannon Drive

Fuquay-Varina, North Carolina 27526

SIXTH JOINT INVENTOR:

Full name

Jörn Görlach

Signature

:



Date

(MM/DD/YY)

Citizenship

Germany

Residence

Durham, North Carolina

P.O. Address

3907 King Charles Road

Durham, North Carolina 27707

IMPORTANT: Before this declaration is signed, the patent application (the specification, the claims and this declaration) must be read and understood by each person signing it, and no changes may be made in the application after this declaration has been signed.

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name, and

I believe I am an original, first and joint inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled

GENES FOR THE BIOSYNTHESIS OF EPOTHILONES the specification of which was filed on June 17, 1999 as U.S. Application No. 09/335,409.

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims.

I acknowledge my duty to disclose all information which is known by me to be material to the patentability of this application as defined in 37 C.F.R. §1.56.

I hereby claim the benefit under 35 U.S.C. §119(a)-(d) or §365(b) of any foreign application(s) for patent or inventor's certificate listed below and under 35 U.S.C. §365(a) of any PCT international application(s) designating at least one country other than the United States listed below and have also listed below any foreign application(s) for patent or inventor's certificate or any PCT international application(s) designating at least one country other than the United States for the same subject matter and having a filing date before that of the application the priority of which is claimed for that subject matter:

None

I hereby claim the benefit under 35 USC §119(e) of any United States provisional application(s) listed below:

 Application No.
 Filing Date

 60/155,183
 June 18, 1998

 60/101,631
 September 24, 1998

 60/118,906
 February 5, 1999

I hereby claim the benefit under 35 U.S.C. §120 of any United States application(s) listed below and under 35 U.S.C. §365(c) of any PCT international application(s) designating the United States listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in said prior application(s) in the manner required by the first paragraph of 35 U.S.C. §112, I acknowledge the duty to disclose all information known by me to be material to patentability as defined in 37 C.F.R. §1.56 which became available between the filing date(s) of the prior application(s) and the national or PCT international filing date of this application:

None

I hereby appoint the attorneys and agents associated with Customer No. 22847, respectively and individually, as my attorneys and agents, with full power of substitution and revocation, to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith.

Please address all communications to Larry W. Stults, Novartis Corporation, Patent Department, P.O. Box 12257, Research Triangle Park, NC 27709-2257.

-
<u> </u>
Ţ
: 📥
£. 10.11
, H
-
, 4
H
ı ı d ı
:===
=
Į.
j
:=

FIRST JOINT INVENTO	DR:	1TC	VEN	IN\	JOINT	FIRST
---------------------	-----	-----	-----	-----	--------------	-------

Full name	Thomas Schupp
ruii name	i ilulias Schupp

Signature : _____

Date : _____

(MM/DD/YY)

Citizenship : Switzerland

Residence : Mohlin, Switzerland

P.O. Address : Froschmattweg 5
Mohlin 4313

Switzerland

SECOND JOINT INVENTOR:

Signature

Full name : James Madison Ligon

Date : 11/02/99

(101101/00/11)

Citizenship : United States of America

Residence : Apex, North Carolina

P.O. Address : 3616 South Point Drive

Apex, North Carolina 27502

THIRD JOINT INVENTOR:

Full name : Istvan Molnar

Signature : \(\frac{1}{8}\)

Date : 11/04/99 (MM/DD/YY)

Citizenship : Hungary

Residence : Durham, North Carolina

P.O. Address : 905 Starling Lane

Durham, North Carolina 27713

		=	٤
	i	2	
		17	1 mm 1 mm
		٠.	Ĕ.
:	:		Mines II th
:	:	4	Times of
:	:		<u>.</u>
•	:	Ę	Gin.
i			
:	;		i,
	:	¥	<u>=</u> ,
:	:		-
:	:	į	-
:	:	∓	1
:	:	2	<u>.</u>

/\	
-	

FOURTH JOINT INVENTOR:

Ross Zirkle Full name

Signature

Date

United States of America Citizenship Raleigh, North Carolina Residence

6532 Wynbrook Way P.O. Address

Raleigh, North Carolina 27612

FIFTH JOINT INVENTOR:

Devon Dawn Cyr Full name

Signature

Date (MM/DD/YY)

United States of America Citizenship

Fuquay-Varina, North Carolina Residence

413 Vuncannon Drive P.O. Address Fuquay-Varina, North Carolina 27526

SIXTH JOINT INVENTOR:

Jörn Görlach Full name

Signature

Date (MM/DD/YY)

Citizenship Germany

Durham, North Carolina Residence

P.O. Address 3907 King Charles Road

Durham, North Carolina 27707

IMPORTANT: Before this declaration is signed, the patent application (the specification, the claims and this declaration) must be read and understood by each person signing it, and no changes may be made in the application after this declaration has been signed.

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name, and

I believe I am an original, first and joint inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled

GENES FOR THE BIOSYNTHESIS OF EPOTHILONES the specification of which was filed on June 17, 1999 as U.S. Application No. 09/335,409.

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims.

I acknowledge my duty to disclose all information which is known by me to be material to the patentability of this application as defined in 37 C.F.R. §1.56.

I hereby claim the benefit under 35 U.S.C. §119(a)-(d) or §365(b) of any foreign application(s) for patent or inventor's certificate listed below and under 35 U.S.C. §365(a) of any PCT international application(s) designating at least one country other than the United States listed below and have also listed below any foreign application(s) for patent or inventor's certificate or any PCT international application(s) designating at least one country other than the United States for the same subject matter and having a filing date before that of the application the priority of which is claimed for that subject matter:

None

I hereby claim the benefit under 35 USC §119(e) of any United States provisional application(s) listed below:

Application No.	Filing Date
60/155,183	June 18, 1998
60/101,631	September 24, 1998
60/118,906	February 5, 1999

I hereby claim the benefit under 35 U.S.C. §120 of any United States application(s) listed below and under 35 U.S.C. §365(c) of any PCT international application(s) designating the United States listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in said prior application(s) in the manner required by the first paragraph of 35 U.S.C. §112, I acknowledge the duty to disclose all information known by me to be material to patentability as defined in 37 C.F.R. §1.56 which became available between the filing date(s) of the prior application(s) and the national or PCT international filing date of this application:

None

I hereby appoint the attorneys and agents associated with Customer No. 22847, respectively and individually, as my attorneys and agents, with full power of substitution and revocation, to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith.

Please address all communications to Larry W. Stults, Novartis Corporation, Patent Department, P.O. Box 12257, Research Triangle Park, NC 27709-2257.

ļ: 4
Ţ
1
-
÷
::
: 32:
: 🚣
: 🚣
Į,
1i

FIRST JOINT INVEN	TOR:		
	Full name	:	Thomas Schupp
	Signature	:	
	Date	:	(MM/DD/YY)
·	Citizenship	:	Switzerland
	Residence	:	Mohlin, Switzerland
	P.O. Address	:	Froschmattweg 5 Mohlin 4313 Switzerland
SECOND JOINT INV	ENTOR:		
	Full name	:	James Madison Ligon
	Full name Signature	:	James Madison Ligon
		:	James Madison Ligon (MM/DD/YY)
	Signature	: :	
	Signature Date	: : : : : : : : : : : : : : : : : : : :	(MM/DD/YY)
	Signature Date Citizenship	: : : : : : : : : : : : : : : : : : : :	(MM/DD/YY) United States of America
THIRD JOINT INVEN	Signature Date Citizenship Residence P.O. Address	:	(MM/DD/YY) United States of America Apex, North Carolina 3616 South Point Drive
THIRD JOINT INVEN	Signature Date Citizenship Residence P.O. Address	:	(MM/DD/YY) United States of America Apex, North Carolina 3616 South Point Drive

Signature

Date

(MM/DD/YY)

Citizenship

Hungary

Residence

Durham, North Carolina

P.O. Address

905 Starling Lane Durham, North Carolina 27713

	: 3	
1	1 12	-
		=
į		L
::	7	=
٠:	7. F.	200
;	÷	
٠.	4	5
::		
	=	
ŀ	ŧ	2
	÷	
į,		
i,		

FOURTH JOINT INVE	:NTOP:		
FOURTH JOINT INVE	Full name	:	Ross Zirkle
	Signature	:	
·	Date	:	(MM/DD/YY)
	Citizenship	:	United States of America
	Residence	:	Raleigh, North Carolina
	P.O. Address	:	6532 Wynbrook Way Raleigh, North Carolina 27612
FIFTH JOINT INVENT	TOR:		
	Full name	:	Devon Dawn Cyr
•	Signature	:	Devon D. Cop
•	Date	:	10/26/99 (MM/DD/YY)
	Citizenship	:	United States of America
	Residence	:	Fuquay-Varina, North Carolina
	P.O. Address	:	413 Vuncannon Drive Fuquay-Varina, North Carolina 27526
SIXTH JOINT INVEN	TOR:		
	Full name	:	Jörn Görlach
	Signature	:	·
·	Date	:	(MM/DD/YY)
	Citizenship	:	Germany

Citizenship : Germany

Residence : Durham, North Carolina
P.O. Address : 3907 King Charles Road

P.O. Address : 3907 King Charles Road Durham, North Carolina 27707 IMPORTANT: Before this declaration is signed, the patent application (the specification, the claims and this declaration) must be read and understood by each person signing it, and no changes may be made in the application after this declaration has been signed.

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name, and

I believe I am an original, first and joint inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled

GENES FOR THE BIOSYNTHESIS OF EPOTHILONES the specification of which was filed on June 17, 1999 as U.S. Application No. 09/335,409.

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims.

I acknowledge my duty to disclose all information which is known by me to be material to the patentability of this application as defined in 37 C.F.R. §1.56.

I hereby claim the benefit under 35 U.S.C. §119(a)-(d) or §365(b) of any foreign application(s) for patent or inventor's certificate listed below and under 35 U.S.C. §365(a) of any PCT international application(s) designating at least one country other than the United States listed below and have also listed below any foreign application(s) for patent or inventor's certificate or any PCT international application(s) designating at least one country other than the United States for the same subject matter and having a filing date before that of the application the priority of which is claimed for that subject matter:

None

I hereby claim the benefit under 35 USC §119(e) of any United States provisional application(s) listed below:

Application No.	Filing Date
60/155,183	June 18, 1998
60/101,631	September 24, 1998
60/118,906	February 5, 1999

I hereby claim the benefit under 35 U.S.C. §120 of any United States application(s) listed below and under 35 U.S.C. §365(c) of any PCT international application(s) designating the United States listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in said prior application(s) in the manner required by the first paragraph of 35 U.S.C. §112, I acknowledge the duty to disclose all information known by me to be material to patentability as defined in 37 C.F.R. §1.56 which became available between the filing date(s) of the prior application(s) and the national or PCT international filing date of this application:

None

I hereby appoint the attorneys and agents associated with Customer No. 22847, respectively and individually, as my attorneys and agents, with full power of substitution and revocation, to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith.

Please address all communications to Larry W. Stults, Novartis Corporation, Patent Department, P.O. Box 12257, Research Triangle Park, NC 27709-2257.



FIRST JOINT INVENTOR:

Date :		Full name	:	Thomas Schupp
Citizenship : Switzerland Residence : Mohlin, Switzerland P.O. Address : Froschmattweg 5 Mohlin 4313 Switzerland SECOND JOINT INVENTOR: Full name : James Madison Ligon Signature : Date : (MM/DD/YY) Citizenship : United States of America Residence : Apex, North Carolina P.O. Address : 3616 South Point Drive Apex, North Carolina 27502 THIRD JOINT INVENTOR: Full name : Istvan Molnar		Signature	:	
Citizenship : Switzerland Residence : Mohlin, Switzerland P.O. Address : Froschmattweg 5 Mohlin 4313 Switzerland SECOND JOINT INVENTOR: Full name : James Madison Ligon Signature : Date : (MM/DD/YY) Citizenship : United States of America Residence : Apex, North Carolina P.O. Address : 3616 South Point Drive Apex, North Carolina 27502 THIRD JOINT INVENTOR: Full name : Istvan Molnar		Date	:	(MM/DD/XX)
Residence : Mohlin, Switzerland P.O. Address : Froschmattweg 5 Mohlin 4313 Switzerland SECOND JOINT INVENTOR: Full name : James Madison Ligon Signature : Date : (MM/DD/YY) Citizenship : United States of America Residence : Apex, North Carolina P.O. Address : 3616 South Point Drive Apex, North Carolina 27502 THIRD JOINT INVENTOR: Full name : Istvan Molnar				•
P.O. Address : Froschmattweg 5 Mohlin 4313 Switzerland SECOND JOINT INVENTOR: Full name : James Madison Ligon Signature : Date : (MM/DD/YY) Citizenship : United States of America Residence : Apex, North Carolina P.O. Address : 3616 South Point Drive Apex, North Carolina 27502 THIRD JOINT INVENTOR: Full name : Istvan Molnar		•	:	
Mohlin 4313 Switzerland SECOND JOINT INVENTOR: Full name : James Madison Ligon Signature : (MM/DD/YY) Citizenship : United States of America Residence : Apex, North Carolina P.O. Address : 3616 South Point Drive Apex, North Carolina 27502 THIRD JOINT INVENTOR: Full name : Istvan Molnar		Residence	:	Mohlin, Switzerland
Full name : James Madison Ligon Signature :		P.O. Address	:	Mohlin 4313
Signature : Date : (MM/DD/YY) Citizenship : United States of America Residence : Apex, North Carolina P.O. Address : 3616 South Point Drive Apex, North Carolina 27502 THIRD JOINT INVENTOR: Full name : Istvan Molnar	SECOND JOINT INVE	NTOR:		
Date (MM/DD/YY) Citizenship : United States of America Residence : Apex, North Carolina P.O. Address : 3616 South Point Drive Apex, North Carolina 27502 THIRD JOINT INVENTOR: Full name : Istvan Molnar		Full name	:	James Madison Ligon
Citizenship : United States of America Residence : Apex, North Carolina P.O. Address : 3616 South Point Drive Apex, North Carolina 27502 THIRD JOINT INVENTOR: Full name : Istvan Molnar		Signature	:	
Citizenship : United States of America Residence : Apex, North Carolina P.O. Address : 3616 South Point Drive Apex, North Carolina 27502 THIRD JOINT INVENTOR: Full name : Istvan Molnar				
Residence : Apex, North Carolina P.O. Address : 3616 South Point Drive Apex, North Carolina 27502 THIRD JOINT INVENTOR: Full name : Istvan Molnar		Date	:	(MM/DD/YY)
P.O. Address : 3616 South Point Drive Apex, North Carolina 27502 THIRD JOINT INVENTOR: Full name : Istvan Molnar		Citizenship	:	United States of America
Apex, North Carolina 27502 THIRD JOINT INVENTOR: Full name : Istvan Molnar		Residence	:	Apex, North Carolina
Full name : Istvan Molnar		P.O. Address	•	
	THIRD JOINT INVENT	OR:		
Signature :		Full name	:	Istvan Molnar
		Signature	:	
Date :(MM/DD/YY)		Date	:	(MM/DD/YY)
Citizenship : Hungary		Citizonahin		•

3

Residence

P.O. Address

Durham, North Carolina

905 Starling Lane Durham, North Carolina 27713

. :=
1
إ
: :\$1
H
, agi
:4
:==
Ų
j

_ ~	

FOURTH JOINT INVENTOR:

Full name	:	Ross Zirkle	

Signature : _____

Date : _______(MM/DD/YY)

Citizenship : United States of America

Residence : Raleigh, North Carolina

P.O. Address : 6532 Wynbrook Way

Raleigh, North Carolina 27612

FIFTH JOINT INVENTOR:

Full name : Devon Dawn Cyr

Signature : _____

Date : _______(MM/DD/YY)

Citizenship : United States of America

Residence : Fuquay-Varina, North Carolina

P.O. Address : 413 Vuncannon Drive

Fuquay-Varina, North Carolina 27526

SIXTH JOINT INVENTOR:

Full name : Jörn Görlach

Signature : _____

Date : (444/DD200)

(MM/DD/YY)

Citizenship : Germany

Residence : Durham, North Carolina
P.O. Address : 3907 King Charles Road

Durham, North Carolina 27707

